UNITED STATES of AMERICA

NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION

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MARINE PROTECTED AREAS

FEDERAL ADVISORY COMMITTEE

THIRD MEETING, DAY 2 OF 3

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WEDNESDAY, APRIL 7, 2004

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KEY LARGO, FLORIDA

The Committee convened at 8:35 a.m. in the African Queen Room, at the Holiday Inn Key Largo, 99701 Overseas Highway, Key Largo, Florida.

Committee Members Present:

- Dr. Tundi Agary
- Mr. Robert L. Bendick, Jr.
- Mr. David Benton
- Dr. Daniel W. Bromley, Chairman
- Dr. Anthony Chatwin
- Dr. Michael J. Cruickshank
- Dr. Rodney M. Fujita
- Dr. John R. Halsey
- Dr. Mark A. Hixon
- Mr. George D. Lapointe
- Dr. Bonnie J. McCay, Vice Chair
- Mr. Melvin E. Moon, Jr.
- Mr. Robert J. Moran
- Dr. Steven N. Murray
- Mr. Michael Nussman
- Dr. John Ogden
- Mr. Terry O'Halloran
- Mr. Lelei Peau
- Dr. Walter T. Pereyra
- Mr. R. Max Peterson
- Ms. Barbara Stevenson
- Dr. James P. Ray
- Dr. Daniel Suman
- Captain Thomas E. Thompson

Ex-Officio Members Present:

- Ms. Mary Glackin
- Ms. Jacqueline Schafer
- Mr. Merlin Bartz
- Ms. Lisa Phelps
- Mr. Jeffrey Pearson
- Mr. Randall Bowman

Also Present:

Dr. James Kendall Lauren Wenzel

From the National MPA Center:

Ms. Ginger Hinchcliff, Director, Training & Technical Assistance Institute

Mr. Joseph A. Uravitch, AICP, Director

Dr. Charles Wahle, Director, MPA Science Institute

Panel Members:

- Billy Causey, Superintendent, Florida Keys National Marine Sanctuary
- Kacky Andrews, Director, Florida Department of Environmental Protection, Coastal and Aquatic Managed Areas
- Linda Canzanelli, Superintendent, Biscayne National Park
- Bill Kruczynski, US Environmental Protection Agency Program Manager, FKNMS, Water Quality Protection Program
- Bob Howard, Resource Manager, Everglades and Dry Tortugas National Bank
- Rick Spinrad, Assistant Administrator for National Ocean Service

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P-R-O-C-E-E-D-I-N-G-S

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(8:35 o'clock a.m.)

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CHAIRMAN BROMLEY: I would like to call our meeting to order, please. I'd like to acknowledge David Benton who is here today with us. Thank you, David. And Tundi is here, but I don't see her at the moment. But we're a little more complete today than we were yesterday. So welcome.

The organization for today is that in a very few moments we will receive provisional reports from the subcommittees. We'll take a break at ten. Subcommittees will meet from 10:14 to 11:15. And we ask that when you come back in at 11:15, those of us who are here at the table, at least up in the front, move back so that our panel, the Inter-Agency Coordination of Marine Protected Areas in Florida, can sit up here at the front, and we will introduce those people at that time. So when we come back from our break, those of us in the front row, Joe, is that the idea, move back there.

The dress to day is remarkably different from yesterday. There's some danger that it might be catching, and future meetings might look rather more than fun than the meetings on the past. So I'm admiring all of your legs, and thank goodness they

1 have these skirts in front of the table so it isn't too distracting. All I see is white toes sticking out 2 under these tables. 3 4 Terry, I like your toes very much. I hope 5 this isn't on the record. It probably is. 6 (Laughter.) 7 CHAIRMAN BROMLEY: Moving right along. 8 And then this afternoon, of course, we have a serious 9 working adventure on the books. So we've received 10 some criticism for meeting in nice places, and so I 11 suppose this afternoon we'll really bring down angry 12 e-mails from taxpayers who somehow manage to hear that 13 we're out on a boat. We really are working hard. MR. LAPOINTE: We should make it worth the 14 15 anger. 16 CHAIRMAN BROMLEY: That's right. Ιf 17 they're going to be angry at us, let's just do it the 18 whole way. 19 So we are ready now to receive what we 20 provisional have called reports from the 21 Mark, shall we start in order this subcommittees. 22 time, Number One? 23 DR. HIXON: I'm actually here. Thank you, Mr. Chairman. 24

Subcommittee One yesterday grappled with

1	some very difficult issues and I believe made very
2	good progress on first, revising and starting to
3	finalize the vision and goal statement for a National
4	System of Marine Protected Areas, and addressing in
5	particular the thorny issue of what does "lasting
6	protection" mean in the definition of MPA given in the
7	Executive Order. We've actually "we're very close to
8	completion on that and may be providing our
9	definitions of lasting protection to the full
10	Committee before leaving, but I don't want to
11	guarantee that at this point.
12	That's it.
13	CHAIRMAN BROMLEY: That's all. Wonderful.
14	DR. HIXON: That's all we did.
15	(Laughter.)
16	CHAIRMAN BROMLEY: That's all you did.
17	Any other comments from others on " you
18	could elaborate a bit more. We have an hour and a
19	half on the agenda. We don't need to kill useless
20	time.
21	DR. HIXON: I prefer to be succinct.
22	CHAIRMAN BROMLEY: Amazing. Okay, thank
23	you.
24	Anyone in Subcommittee One want to
25	elaborate on Mark's?

Okay, Lelei, Subcommittee "oh, yes, John?

DR. OGDEN: Thank you. What about other definitions, Mark, particularly MPA itself? Are you working on those as well?

DR. HIXON: Yes. The vision and goal statement contains quite a few key words and key concepts that then are followed by a glossary of very explicit definitions. We believe this to be important because of the mis-communication that takes place when a particular word is used and five different people hear it and have five different meanings in their So we're actually spending quite a bit of time making very explicit definitions, clarifying the and making more explicit definition of MPA in the Executive Order.

CHAIRMAN BROMLEY: Yes, George?

MR. LAPOINTE: This is a bit of elaboration to what Mark said. One of the things we're not doing is trying to reinvent the wheel. this glossary section we're looking at other documents that are available to us, other people who have already beaten these horses dead, and stealing literally from them so that we don't have to then have our MPA definition compared to somebody else's, you know, slightly different.

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1	DR. HIXON: And if I could add to that.
2	We're actually using the original wording from the
3	Executive Order, but simply defining the terms within
4	that definition.
5	CHAIRMAN BROMLEY: May I ask, as you do
6	this, are you referring back to the sources from which
7	you find compelling definitions, so that it shows the
8	record that you're " that while you have borrowed these
9	terms or you're invoking them, that they are
10	consistent with the way so-and-so or states have used
11	them, or particular Federal agencies have used them?
12	I think that would be useful if you anchor them in
13	some sort of history.
14	DR. HIXON: That is correct. We're
15	actually going to have references associated with the
16	glossary.
17	CHAIRMAN BROMLEY: Okay.
18	DR. HIXON: So we cite a particular
19	authority and have that reference.
20	CHAIRMAN BROMLEY: Yeah, right. Good,
21	okay. I think that's great.
22	Yes, Rod?
23	DR. FUJITA: Thank you, Mr. Chairman.
24	Mark, is your subcommittee thinking about
25	a system in terms of distinct by geographic regions?

1	The reason I ask is because the Stewardship Committee
2	is thinking about making a recommendation about doing
3	stewardship processes on a regional basis.
4	DR. HIXON: The overall system would
5	comprise the explicitly defined Marine Protected Areas
6	in U.S. waters. Within the overall National System
7	there would be what we're tentatively calling sub-
8	systems that are of different perspectives. So there
9	would be programmatic sub-systems, such as the
10	National Marine Sanctuary System. There would be
11	regional sub-systems, such as the Gulf of Mexico. And
12	there would be functional sub-systems, such as those
13	particularly targeting sustainable production for
14	fisheries.
15	CHAIRMAN BROMLEY: Are there other
16	questions or comments for Mark?
17	Okay, Lelei, are you ready for
18	Subcommittee Two?
19	MR. PEAU: Thank you, Chair.
20	Subcommittee Two, as I reported yesterday,
21	we came up with four topic areas, as you can see:
22	building, planning, enforcement and compliance, and
23	followed by monitoring and adaptive management.
24	From these four, Mr. Chair, we came up
25	with eight highlights, not necessarily under the four

topics. The first is to identify and consult with a broad range of stakeholders at the outset, when considering whether to use MPAs and when planning and implementing programs that include MPAs, as well as after MPA establishment when evaluating and adapting MPAs.

highlight: The second recognize the importance of full and genuine stakeholder creating conditions participation in for greater legitimacy, awareness and sense of share ownership and community, all the central ingredients for compliance.

The third highlight: create social and economic incentives to increase voluntary compliance and follow-up enforcement as well as levels of participation in planning and evaluation.

The fourth highlight calls for enhancement outreach and education associated with MPAs. An informed local user group is likely to achieve a higher level of compliance as stakeholders become increasingly aware of the ecological and economic justification for regulations.

Fifth, use of technological tools to facilitate participatory gathering of ecological and socioeconomic data, incorporation of local knowledge and planning, such as GAS-based decision support

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Sixth is enforcement to assess and compliance aspect of MPA and improve as needed. In biological indicators addition to of enforcement, the socioeconomic status of local stakeholders needs to be assessed, as this can drive the success or failure of MPA.

Seventh is to train and evaluate MPA managers with regard to MPA performance, indicators, desk management, practices and adaptive management.

And eight is funding means and mechanism.

Our group also came up with definitions for stewardship, which is the process and culture and institution intended to insure that qoals and objectives are being achieved. Our intent, Mr. Chair, this afternoon, was to go back to our "the four topic areas that I noted and try to finalize the last two This is enforcement and monitor. topic areas. We spent most of our afternoon on the first two topics. We also recognize that there is a need for us to then formulate specific recommendations that will then be submitted to the Committee as a whole.

CHAIRMAN BROMLEY: Thank you.

MR. PEAU: Now I would like to invite members of Subcommittee Two for any omissions or

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additions to that quick report.

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CHAIRMAN BROMLEY: Yes, Rod?

DR. FUJITA: I just add that we also came up with a provisional definition of the second -- of effectiveness, which is closely related to leadership, and we define effectiveness as the degree to which goals and objectives are met.

CHAIRMAN BROMLEY: May I ask a question on that point?

Do you offer insight as to ways to measure that? I mean, effectiveness is the extent to which they are met, but are there operational indicators, data points? Could I get some elaboration on that?

DR. FUJITA: We don't actually recommend any specific indicators or metrics in our report, because we believe "- I think that it's the consensus that the metrics system and indicators are very dependent on both the site and the set of goals that are adopted for a particular MPA, and indeed will be for a system of MPAs, as distinct from an individual MPA. So I think it's impossible to specify a set of metrics at this point, but our recommendation is that, you know, on a site-specific/goal-specific basis that ecological indicators and socioeconomic indicators, along with metrics, be included.

CHAIRMAN BROMLEY: Okay, Mark?

HIXON: Rod, DR. was there any consideration in their discussion of monitoring and include effectiveness to general recommendations regarding statistical observational design? For example, before and after control impact design, or any type of approach that allows one to discern whether the trajectory occurring within an MPA can be separated from global environmental variation, for example?

DR. FUJITA: John, Dr. Ogden, would you like to speak to that?

Well, following on what Rod DR. OGDEN: just said, certainly this is going to have to be basically a baseline vista and change all sorts of thing for all of the metrics. In fact, when you look at the afternoon's discussion we intend to have in our group, enforcement, compliance, biophysical monitoring, socioeconomic monitoring, all of things are essentially -- would be "- have to be compared against some kind of early-on baseline or pre-implementation baseline. I'm not sure that answers that question. We're not getting into, at this point at least, into the statistical methods or anything like that that are involved.

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1	DR. FUJITA: We do speak to physical power
2	and the need to have enough ways to compare various
3	parts we haven't yet discussed the idea of
4	hypothesis-driven monitoring, which I think speaks to
5	your question. You know, monitoring is specifically
6	designed to differentiate between natural and systemic
7	change and the merits of, you know, before and after
8	sampling and, you know, replicating habitats and so
9	forth. We haven't gotten to that level of detail, but
10	we could if you'd like us to.
11	DR. HIXON: I believe that would be great.
12	CHAIRMAN BROMLEY: Bonnie?
13	DR. McCAY: Yes, I think adaptive
14	management is noted one of the topics, and I think as
15	we get into discussing that with a little more focus,
16	that this will necessarily come up.
17	CHAIRMAN BROMLEY: Other questions?
18	Yes, Max?
19	MR. PETERSON: Maybe more of a comment.
20	I'm glad you're looking at the question of stewardship
21	and effectiveness. Let me suggest that you look at
22	some of the existing definitions, though, because
23	effectiveness, for example, in the common definition
24	means both efficiency and meeting targets, and I think

it's important that we don't create unique definitions

that don't relate to other definitions in common use, because otherwise we'll have a hard time communicating with the public.

CHAIRMAN BROMLEY: Lelei?

MR. PEAU: Just one other added comment I'd like to make on monitoring. We're also looking at some of the existing models and extracting lessons learned from those examples, both successes and also failure, and then build upon those lessons learned in terms of doing monitoring and coming up with indicators that could help for -- you know, suggest for national policy.

CHAIRMAN BROMLEY: Good. Are there other questions?

Yes, Steven?

DR. MURRAY: Just a quick comment. think the conversation has gone "revolved around aspects of monitoring and evaluation. Presumably that will be prefaced by a statement regarding the dedicating importance of resources to carry monitoring and evaluation. My experience with MPAs has been, frequently, it's all too easy to put them in place and then folks sort of walk away from making evaluative efforts to determine whether they have or haven't reached their goals.

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17 I think that " at least we talked in our subcommittee about goals being clearly outlined for MPAs, and we should have in place some effective ability to achieve evaluative efforts, importance of that Ι think really needs be to stressed, certainly from the science standpoint well as from the socioeconomic standpoint. CHAIRMAN BROMLEY: Very good. DR. FUJITA: Let me respond that our subcommittee has considered a number of funding

DR. FUJITA: Let me respond that our subcommittee has considered a number of funding priorities, including socioeconomic research, monitoring, you know, planning processes. We decided to wait until kind of near the end of our deliberations to look at the full spectrum of things that we might want to recommend, so then we could

assign some kind of priority and not pre-judge it.

CHAIRMAN BROMLEY: Okay. Very good.

Are there other "

DR. MURRAY: Just one more quick add-on. These are obviously done, and you pointed out, Rod, studies of temporal trajectories playing out over time scales that sometimes are not consistent with funding decision time scales. And so I think reiterating the importance of that is also critical.

CHAIRMAN BROMLEY: Other comments?

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DR. HIXON: I had another question having to do with this whole issue of what is rigorous science. There seems to be some efforts at various levels of politically defining what rigorous science is, and I was wondering if you were going to attempt to grapple with that issue; for example, defining sciences, both natural science and social science, and including the importance of peer review.

DR. OGDEN: I don't think we've addressed that.

CHAIRMAN BROMLEY: Was your hand up, Lelei?

MR. PEAU: No.

CHAIRMAN BROMLEY: Very well. Yes, Jim.

DR. RAY: Just two comments. When we talk about monitoring we start talking about baseline. Let's be very careful how we use the term baseline, because you could be recommending things that really aren't achievable. A one-time look in space and time is not a baseline. The environment's too variable and changes too much. And so you got to be careful how you use baseline.

Just another comment about peer review.

An awful lot of the kind of monitoring that goes on,

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and sampling that goes on, really isn't the kind of information that will get accepted in most peer review journals. You know, the standard gathering of data, monitoring — it's just hard to get that kind of stuff peer reviewed because a lot of it's not new and novel and it's "there's a lot of monitoring that goes on that never sees the peer review literature. So it's just a problem sometimes as far as, you know, setting that as a criteria. It's desirable and whenver the information justifies it, it should be, because of the metrics, but the fact is there's an awful lot of monitoring that goes on that's very valuable that never sees the light of day as far as peer review.

CHAIRMAN BROMLEY: Mark?

DR. HIXON: Just to respond to Jim. My meaning of peer review definitely includes publication and peer review journals, but it also includes just independent peer review by a panel of scientific advisors or what have you, independent of publication.

CHAIRMAN BROMLEY: John?

DR. OGDEN: That exact same comment.

CHAIRMAN BROMLEY: If I may, on this discussion about science. Would it be useful, since people do try to bludgeon others with the science word, would it be useful for this group or some other

group to have some discussion about what we mean. Jim's intervention about peer review reminds me that what we often mean by science is a process in which a community, a knowledge community, looks at, considers and worries about the veracity of what's undertaken, and that might be useful to talk about -- what we mean It's broader than some people think. I just ask whether this group or some group wants to dig in there just a bit, so that science doesn't become a club that some people use to beat others around. Because we see this а lot in the environmental area. Some people say, "Oh, I have science on my side and all you have is mere opinion, or you just have emotions about this stuff." And we see the dialogue being highjacked by those who will grab a hold of a flag with science on it, and somehow maybe we need to get into that just a bit. I'm just asking.

John, your hand is up.

DR. OGDEN: I think that's an excellent idea, at some point. I'm reminded of the effort of many organizations to provide this definition, because of the confusion about science. I mean, people are confused. They think on the one hand that science is the tools of science, these magnificent tools. On the

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other hand, they think it's a bunch of numbers and models that nobody but a specialist can follow. And it's really much simpler than that, as you alluded to. It's a way of knowing. It isn't the only way of knowing. It is a way of knowing. And I think, you know, in there, in that mix, there are some important concepts that could be brought out.

CHAIRMAN BROMLEY: I think it would be important somewhere along the way to do this.

Yes, Rod?

DR. FUJITA: I think it's a great idea. It's an ongoing controversy and source of confusion. You know, I think there is an approach that one could take to try to develop some attributes; for example, strong inference versus weak inference. That's one attribute of the quality of science. Another is the quality of the data and quality control on the data and the inferences that are drawn from that. You know, there could be a spectrum.

So instead of being a very qualitative and subjective type of judgment about what's this science and what's that science, you could actually have some indicators of what constitutes strong inference versus weak inference

CHAIRMAN BROMLEY: Good.

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22 1 DR. FUJITA: Ι don't know mу subcommittee is equipped to talk about it. We don't 2 3 have that many scientists. 4 CHAIRMAN BROMLEY: Well, maybe that's the 5 best advantage, you know. 6 Yes, Steven?

DR MURRAY: I think you made a very good point here, and I think that it's well worth the group paying some attention to this. I think not only the attributes or characteristics that Rod just discussed, but also I think it's very important to lay out the inherent uncertainty with which science addresses environmental issues. There are some who would like to argue that science works like, you know, the law of gravity, that there has to be absolute certainty with regard to outcomes. Those of us who do science realize, particularly in environmental issues, that there's a considerable amount of uncertainty involved, and best available science and the strength of the evidence and so on need to be the indicators. think that's a very important point to make and to lay out.

CHAIRMAN BROMLEY: Yeah. Science is a process.

Other questions? Yes, George?

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23 MR. LAPOINTE: It's not a question so much as maybe a different view, as we move toward this We need to be cautious that we don't build a system that's so built on science that we can't move forward unless we have it perfect. And there are times when we do "we need to put science in the entire mix of decisions we're making, and be able to move forward without, you know, the perfect science system. CHAIRMAN BROMLEY: That's right. Wonderful. Lelei? MR. PEAU: I just want to add on that

MR. PEAU: I just want to add on that comment. I think it's really an important point, because in the islands I think timing is an attribute to seriously take into consideration, where every decision or action that we have to make is based on the best information that's available. And we cannot wait for, with due respect, for science to kick in, because by the time research is completed, the harm is -- from nature to publication to resources to the ecosystem.

CHAIRMAN BROMLEY: Rod?

DR. FUJITA: Just a quick one. I think that whatever group you're in to talk about science, you ought to consider the standard of science that's

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applied as to management measure. I think it's really important to keep that standard uniform and not have double standards wherein one set of management measures is judged with a much lower standard that science requires than other measures. And I think sort of historically and currently, lot of are based on beliefs management measures evidence whatsoever; whereas others, a very high burden of proof is set for other kinds of measures, including marine reserves, I think.

So anyway, it's something that "it's a matter of science and policy, and how science is applied, to judge the efficacy of the various kinds of managements. It should be a uniform standard.

CHAIRMAN BROMLEY: Bonnie?

DR. McCAY: Speaking to that point and the others, I would want to reinsert the issue of bringing local environmental knowledge, local ecological knowledge, traditional knowledge, into the mix. think George's point is well taken, that there are lots of difference sources of knowledge, with different bases and different kinds of evidence. so I think this is going to be a big challenge, to come up with something that we would all agree with. But I think recognizing the mixtures is extremely

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CHAIRMAN BROMLEY: Wally?

DR. PEREYRA: Thank you, Mr. Chairman.

Following Rod's thinking, I always have to remind myself when I'm thinking of standards and standards by which I will measure levels of the investigation, it's always of my higher the standard of not accepting false likelihood of hypothesis, Ι also increase the rejecting the truth. And that's something that I think in environmental studies we have to keep -- at least I know I have to keep -- in focus all the time, because that trade-off is very important, particularly when we're working in areas where we don't have the data sets that we'd like to have with the controls we'd like to have, and so forth.

CHAIRMAN BROMLEY: John, was your hand up a moment ago?

DR. OGDEN: Max has had his hand up.

CHAIRMAN BROMLEY: Okay, sure, Max.

MR. PETERSON: Let me inject a little bit of what I call practicality into this discussion. One definition of management is a person that's required to make a decision with inadequate information, inadequate funding, and inadequate time -- which I

gather is routine where early decision is required.

and I'm concerned about this whole monitoring thing because I think monitoring is extremely important. It's also a black hole, and it's very difficult to get funding for. You can spend any amount of money that anybody would be able to come up with on monitoring, particularly if it's not well designed and not well thought out.

So let me suggest that I think you had the key. We need to be talking about following scientific principles of making decisions. We may or may not have detailed scientific studies. And I've also sat in a chair where I've had eminent scientists argue both sides, based on long studies that were peer reviewed. So reviewed study а peer doesn't It means that necessarily mean you have the truth. this group of people who reviewed it thought this study was done properly.

The final thought here is, I would suggest that you deal with monitoring and evaluation, that we talk about different kinds of monitoring and evaluation for different purposes. The manager of an area, like the Keys -- you have to do certain daily monitoring and evaluation, based on a lot less than

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detailed studies. And you've got long-term questions,
"Is this area accomplishing it's objectives? Are the
local people buying into this, and is it doing its
educational role?"

So there's a whole bunch of different reasons you're monitoring. And it seems to me what we need to be clear on is, what is the purpose of the monitoring and the studying as you go into it, because then you've explained that to the public and likely to get support. Just using the term, we need to monitor and evaluate this area, is almost sure to glaze over the eyes of any appropriator, as several people have pointed out.

CHAIRMAN BROMLEY: Very good, thank you Barbara?

STEVENSON: think that this is MS. Ι something we definitely should discuss. As I was listening to people commenting, I was very glad that I was on the Committee that was going to discuss it. was very concerned about Rod's comment, because it's " to me what we need is something that says almost the direct opposite. Sometimes you need certain criteria and sometimes you need certain other criteria. obviously not going to discuss it here, but that one could have such different viewpoints means that we

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1 really do need to discuss it. 2 CHAIRMAN BROMLEY: Yeah, great. 3 Terry? 4 MR. O'HALLORAN: My point was regarding 5 the discussion on science. In my experience, a lot of the times when we're talking about science regarding 6 7 the MPAs, we're talking about the biological 8 ecological science, and we tend to forget about the 9 social science. And if at the end of the day the 10 people are using these areas, their behavior 11 acceptance of it is critical to the success. I just 12 want to make sure that we don't forget the importance 13 of the social science aspect of it when we're talking 14 about science. 15 CHAIRMAN BROMLEY: Thank you for that 16 editorial. We are grateful, those of us who are social scientists. 17 I'm very heartened by this conversation. 18 19 I thought I was the only post-modernist in the room, 2.0 and I find that I'm surrounded by a bunch of you that 21 really do believe that science is just stories that we 22 haven't yet found reasons to doubt. 23 (Laughter.) 24 CHAIRMAN BROMLEY: And that is a plausible 25 definition of science. They're stories we tell

29 ourselves that nobody's given us good reason dispute yet. And we hold a lot of beliefs for which 3 there are no data, and yet those beliefs are stories that seem to fit. So this is fun. 4 I had no idea we 5 would get into this here. Are there others who "thanks, Lelei, you really stirred up a storm here. John? DR. OGDEN: Following on your comment really, is that know, it's you common

misconception, I think, that science needs process. The public certainly has this. We are a manifestation of our democracy, and those policy decisions are going to be made by that democracy and informed -- insofar as they can be -- by these stories, and if we "as you put them "and I think as you say, it's as good a definition as we have. So science is informing but not driving, not leading, not making those policy decisions.

CHAIRMAN BROMLEY: Good, okay. Other comments?

Yes, Michael?

DR CRUICKSHANK: As you go through life, you discover that there are myriad points of view on every subject, and in each case a different viewpoint And so it's essential to understand that appears.

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there are different viewpoints, whether we're scientists or engineers.

CHAIRMAN BROMLEY: Good, that's right.

Could I change the subject a little bit back to a point " I may be the only one in the room who gets nervous when I hear stakeholders. But this is a word that's worked its way into our conversation, and Group Two used it a lot. To me that conjures up a narrowing of interests, and I can imagine many, many people who are terribly concerned about the state of the oceans who would not look like a stakeholder. Ιt could be, but is this an idea that we want to think I mean, are the only stakeholders here those who live within X kilometers of the oceans? Amd I know they're not. I see all of you shaking your head. But how could we use this word stakeholder and yet reassure people like myself who live about as far from any ocean as one can live and still be in the continental United States, that those of us in the heartland are stakeholders in the ocean, too? the only one who worries about this?

MR. LAPOINTE: Let's limit it to 10,000 kilometers from the ocean.

CHAIRMAN BROMLEY: 10,000 kilometers from the ocean.

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1	(Laughter.)
2	CHAIRMAN BROMLEY: Let's see. Randy?
3	MR. BOWMAN: If I could provide some
4	reassurance on that. I think that is a standard term
5	that the government agencies have used for quite some
6	time now to mean the public in pretty much all
7	manifestations, both organized and unorganized.
8	CHAIRMAN BROMLEY: Then why don't they use
9	the word public?
10	MR. BOWMAN: It's a buzz word that has
11	crept into government terminology.
12	CHAIRMAN BROMLEY: I'm worried about buzz
13	words.
14	MR. BOWMAN: If you can come up with a
15	better term "
16	CHAIRMAN BROMLEY: Public.
17	MR. BOWMAN: It is a standard term that
18	generally is used to be all inclusive.
19	CHAIRMAN BROMLEY: Two syllables, public.
20	Three syllables, stakeholders. Sorry.
21	Rod?
22	DR. FUJITA: I just wanted to say that one
23	of the draft recommendations that we're working on is
24	to recommend that government agencies charged with
25	protecting the ocean, one of the first steps that they

ought to take would be to identify the interest groups, stakeholders at large, and assess them. Our intent there is to insure that the broadest range of interests are represented from the outset. So we're defining it very, very broadly to include the public.

CHAIRMAN BROMLEY: Okay, Mike?

DR. CRUICKSHANK: I was thinking it's not that old a word. I just came across it about fifteen,

that old a word. I just came across it about fifteen, twenty years ago. Stakeholder, almost like money. I think it really means interested party or interested person, whatever, from whatever background, in my mind anyway.

CHAIRMAN BROMLEY: Thank you. Okay, George?

MR. LAPOINTE: When I worked on a project dealing with public outreach with the International Association of Fish and Wildife Agencies, some social scientist, and I don't have a clue who it was, said a stakeholder is somebody with a direct, indirect or perceived interest in an issue. Because there are members of the public who don't care about certain issues. But it strikes me that "I mean, much like we're taking down definitions and finding one that helps us out in this respect.

CHAIRMAN BROMLEY: Barbara?

1	MS. STEVENSON: I have problems with the
2	word stakeholder, and I was actually going to bring it
3	up in committee yesterday, but I brought up enough
4	stuff I figured I shouldn't bring up another thing.
5	CHAIRMAN BROMLEY: Oh, no, please,
6	Barbara, bring it up.
7	MS. STEVENSON: But to the industry,
8	stakeholder is a piece of wood someone is trying to
9	shove through our heart, and that is why every time we
10	see it we react to it. So if you can come up with
11	some other word, I would suggest it would be helpful
12	CHAIRMAN BROMLEY: Okay. Good. Joe?
13	MR. URAVITCH: Just a minor point, and
14	it's really not a question, it's just sort of a
15	statement, to make sure the neglected region is not
16	forgotten. You keep talking about oceans. We're also
17	involved in the Great Lakes. I just wanted to remind
18	everybody. Every once in a while you sort of have to
19	do that.
20	CHAIRMAN BROMLEY: Okay, good. Max?
21	MR. PETERSON: I am also nervous about the
22	word stakeholder. I think what maybe we're thinking
23	about, there are two kinds of people that are affected
24	by a decision to establish an MPA. One is the local
25	people and the surrounding people who have a direct

impact from it. It's not that they have some view in their mind. It's a question of whether their livelihood is affected, or whether "and I was just at the biosphere reserve in Mexico and was told by the person that used to be the deputy in charge of that, that that area existed on paper for about twenty-five years, but it only existed in fact for the last ten years, because it took that long for the local people to decide they would support it.

So I think there are two kinds of -- I prefer to call them different parts of the public. There's the part of the public that's directly affected by the decision, but then there's others that may be a long ways away that are affected by the cumulative impact of decisions. I remember the woman, Dorothy Height, who's a long-time president of the American-African " at the Negro women's group who said "All kinds of decisions are being made that affect us in the central city that we never are considered an interest group, we're not organized, we're considered a stakeholder, but yet those decisions affect us"

So I think that -- I'm nervous with narrowing the thought to just those that have a stake in it because they're an interest group or an

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1	organization. They're already over-represented in our
2	society, to tell you the truth. Those interest groups
3	that are able to hire lobbyists and so on are already
4	over-represented. So we want to be sure that we use a
5	term, I think, that talks about broad representation.
6	CHAIRMAN BROMLEY: Thank you. Bonnie?
7	DR. McCAY: I certainly agree that this is
8	a problematic term, and it has become a shorthand and
9	most of us aren't explicit about what it means. So I
10	would urge us to find something else.
11	One of the problems is, even if we say
12	interested parties, as Max has suggested, we may not
13	be capturing the realities, the social realities.
14	There are lots of people who are groups whose
15	interests are invisible, silent.
16	MR. PETERSON: I'm not suggesting
17	interested parties. I'm suggesting public as a whole.
18	DR. McCAY: Yeah, yeah. So But that's
19	one of the ways to think about it. Who has interest
20	in this, and we often " it takes a lot of work to find
21	out who that might be, but there's also the public
22	trust. And even if people do not have interest, they
23	may have rights.
24	CHAIRMAN BROMLEY: Okay. Jim, and then
25	Bob Bendick.

DR. RAY: There is a little problem in trying to define and use the word stakeholder, because the realty is "let's take for example, the Florida Keys Marine Sanctuary. Let's say they were going to make some change. Would it really affect how people use the Sanctuary? It would affect the local people.

And so by requirement, they have to have public hearings for discussion of it. So whether you like to come or not, they have to identify who they consider to be the interested parties, the stakeholder groups, however you want to define it.

So the question is, is there some local organization they're supposed to contact to make sure that you've got your input? The reality is that it's very difficult. They have to have a public meeting and allow everyone to have an opportunity to discuss. They have to identify, you know, who those interested organizations and parties are, not only the local people but those that represent, you know, the broader country. So it's a real problem on a day-to-day basis, to identify, you know, who those groups and organizations are that represent the public at large, because again, it's not realistic to be sending public notices for a meeting in Marathon Key, you know, to Alaska and every place else, you know, invite them to

1 come to come to a meeting. It's an interesting discussion over, you 2 3 know, what are the stakeholders' group. It still gets narrowed back down. 4 5 CHAIRMAN BROMLEY: Bob Bendick? This is probably terribly 6 MR. BENDICK: 7 out-dated, but a bunch of the stakeholders in these 8 issues that we're talking about aren't born yet, can't 9 represent themselves in these forums, and somebody has 10 to keep them in mind. Maybe it's the scientists or 11 someone. But we can " scientists in terms of 12 projecting what's likely to happen years from now. 13 But I " while I'm a strong believer in sort of the 14 democratic process, we do have to think about those 15 interests that are not able to be at the table yet. 16 CHAIRMAN BROMLEY: Good. Thank you, Bob. 17 Are there other discussions, are 18 questions, reactions, or anything? 19 Yes, Wally? 20 DR. PEREYRA: Thank you, Mr. Chairman. 21 I think what I hear is talking about here or discussing is what I've heard labeled as "intrinsic 22 existence" value, which is a value that is there but 23 it's very hard to quantify, and a lot of the intrinsic 24

existence value that we have is in the environment.

I think it is expressed in a way by a fairly large body of people in small amounts of value they place, but as a whole it represents a fairly significant value to the marine environment. quite often we don't hear that voice expressed because it isn't focused, it isn't the sort of voice that would come up and maybe make a presentation to us or to other organizations of this type. And so we, I guess, as decision-makers, have to sit back and try to gauge this rather diffuse value somehow represented out there. And I think that's a challenge that we have to take into consideration when we're dealing with what we're dealing with here.

CHAIRMAN BROMLEY: Thank you. If I may follow up on that.

economics, In resource we have the terminology use value and non-use value, which I think we're always kind of getting around. Use value, back to Jim's point, are those who actually use the thing. Non-use value are those who care about it but don't And then we have something called option use it. value or existence value, which is Bob Bendick's in the sense that people care about interest, existence of the Florida Keys Preserves, or they care about a particular asset even though they may never

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use it, and they care about it for their grandchildren or what have you.

And so there is a literature that seeks to take this idea of a stakeholder and elaborate it a bit, so that it gives standing, if I may use a legal term, gives standing to people who are not users, who don't have an income stream dependent upon it, but yet have an interest in it. They care about it either because they may use it, that's option value, or they never intend to use it but they want to make sure that it's there for their grandchildren.

And how we want to get into that, which group wishes to take it up, we can decide that later.

But it seems to me this discussion about stakeholders does get us into that domain a little bit.

Rod?

DR. FUJITA: Absolutely it does, and I would argue that it also, if we want to get into this in a deeper way, it has a lot of implications for the way socioeconomic analysis is conducted. In my experience, the classic cost-benefit analysis that's applied in the environmental impact assessments of ocean conservation measures is terribly skewed toward an emphasis on economic cost side and short-term horizons, versus a longer-term horizon and market

value, the non-use value, because they're more difficult to quantify.

So there's a real need to "and that's one of the only ways that managers can assess or consider the impact of a decision on non-local stakeholders of future generations, is to try to capture that in the analysis. So if you're using an analysis and liken it to trying to assess the prospect of buying a house -- knowing only the termite report and not knowing any of the amenities that the house offers -- it's a very skewed analysis. It's likely to lead to bad decisions.

So I think one of the really important aspects of this whole discussion, that one of the subcommittees ought to take on, is how to fix the cost benefit or other kinds of socioeconomic analysis used in a quantitative way to guide decision-making on MPAs and other ocean conservation measures.

CHAIRMAN BROMLEY: If I may, I'd like to ask if Subcommittee Two would give some thought to this. And the only thing I would say is, I don't think you want to try to fix cost benefit analysis, sorry Rod, not that it doesn't need fixing, I'll fix it, yeah. But if you're going to talk about stewardship, and I believe that's in the title of

Subcommittee Two, you need to dig down a little bit, I think, to help us figure out what this is. And Subcommittee One is talking about lasting protection, I believe, we would like to know what that means, but it also connects with stewardship, and we'd like to know what that means, stewardship for who. Who exactly are we stewarding this thing for, and why?

So I think it falls in Subcommittee Two, I think.

David, your hand is up?

MR. BENTON: Thank you, Mr. Chairman.

Your point is very well taken, and I was actually thinking I was going to ask this at the end after we got all the reports, but I think maybe this is a good time. If you talked about this yesterday, I apologize, but one of the things that's been sort of troubling me a bit is how we're going to handle, and what your plan is, about how we're going to review and get real interaction around this group with the products of the different subcommittees.

I find it very difficult right now to track exactly what's going on in the subcommittees, to then see how we're going to have some real quality time to deliberate on what the recommendations for this body is. Language, if I could, the language in

the guidelines that were passed out by the Center staff that indicated that maybe even the subcommittees were going to directly transmit some of the materials straight to the agencies, which I don't think was the intention. I think it was maybe poor drafting in what they wrote.

At some point, maybe after we get the report from Subcommittee Three or whatever, I don't know, but at some point I would appreciate a discussion on how we're going to see their products, and then how we're going to deal with the products. In a way, it might be useful to get earlier drafts to inform the subcommittees that maybe they're going down a path that isn't all that "isn't going to be all that productive. I don't know. I really don't know.

CHAIRMAN BROMLEY: It is something that we addressed yesterday at several different times. Rather than repeat it now, if it's all right with you, we can "you and I can chat about it, but let me just give you a brief shorthand.

Subcommittees do not in any way submit anything to the principals who are guiding us and who have authorized us to work. Everything subcommittees do comes back to us for serious discussion and deliberation. It was my position yesterday that this

1	large group will be more effective, directly dependent
2	upon how much hard work and combat takes place in the
3	subcommittees, and I ask that when the subcommittees
4	do report back to the full group that they come here
5	with propositions around which there is large
6	consensus, super-majority support for the positions
7	that they bring to us. And if they can't reach solid
8	agreement on stuff, then what have you. But we did go
9	into that yesterday, and others, I think, have
10	indicated they'd like to contribute.
11	But the point is, subcommittees do nothing
12	except the work, and we act on the work they have
13	done, and if we don't like the work they've done, we
14	send it back to them and say, "Please, go back and
15	tell us exactly what you had in mind here."
16	Is that what I said yesterday? Is that
17	what we sort of agreed to?
18	George, and then Mark and Tony.
19	MR. LAPOINTE: My question wasn't on that
20	process so much, another statement.
21	CHAIRMAN BROMLEY: Well, can I come back
22	to you? Oh, let me " Mark and Tony.
23	DR. HIXON: Yeah, I confirm what you said
24	just now, Mr. Chairman. I also wanted to add that I'm

not sure all the subcommittees are doing this, but at

1 least Subcommittee One has posted on the secure web page every draft of every document we've worked on. 2 3 So any full Committee member has access to that at any 4 time. 5 CHAIRMAN BROMLEY: Good. Tony? 6 DR. CHATWIN: My point, Mr. Chairman, is 7 to the previous discussion. 8 CHAIRMAN BROMLEY: Well, fine. Are there 9 others that want to "did I say today what I said 10 yesterday? still an acceptable way Is that operating? 11 12 David? Just a minor clarification. 13 MR. BENTON: 14 Before we leave this meeting tomorrow we will have a 15 draft, some kind of draft from different subcommittees 16 to look at ahead of time when we get into discussions 17 of their report, or are we just going to get a verbal 18 report? 19 CHAIRMAN BROMLEY: My guess is there will 2.0 What we expect tomorrow, what we be some variation. 21 ask for by tomorrow, in their sort of preliminary 22 final reports, is a progress report of where they 23 the different issues stand that they have on 24 undertaken to deliberate. And they will give us that

in a variety of ways. I don't know whether it will be

written or whether it will be a verbal report.

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What they will tell us is, "Here are the things we have settled on at the moment." We are not, I don't think, in a position tomorrow to act on any of them, other than to say, "Very good. That's a nice list for you to keep working on, and you've ignored some stuff that somebody around this table thinks Subcommittee Three ought to dig into a bit," and that what this full Committee will do tomorrow is, I think, ratify the work plans that are going to go forward by the subcommittees to be flushed out, and they will report back to us at our fall meeting, which we think will be some time in September. And that's the process that I envisioned. I think that's sort of what we talked about yesterday. Is that right?

Okay, is this on the process, Terry?
Yeah, go ahead.

MR. O'HALLORAN: I agree with what you said, Mr. Chairman, about the process. I think maybe at the end of these meetings the subcommittees " I want commend Subcommittee One for having to their information up on our secure website. I think that is very good, and perhaps at the end of our sessions here between now and September the other subcommittees have material on those websites, so that everyone has

1 access to that, time to contemplate, e-mails back and forth, and continue some dialogue in that way. 2 3 Yeah, CHAIRMAN BROMLEY: that's my 4 understanding. That would be wonderful. 5 Okay, now Tony. DR. CHATWIN: Thank you, Mr. Chairman. 6 7 comment was just in terms 8 stakeholder discussion, and I think the statement made 9 was that Subcommittee Two should go and determine who 10 we are focusing on, and I'd just like to bring to the 11 attention of the Committee that in our mandate, in the 12 Executive Order, it's quite clear that it's for the 13 benefit of present and future generations. 14 not a question of whether we should consider, but how 15 best the National System to benefit present and future 16 generations. 17 CHAIRMAN BROMLEY: Okay. Thank you. 18 George? 19 Bob, when you were talking MR. LAPOINTE: the value -- future generations, you were 20 21 talking about values for, not values of. I thought we 22 were going to get into " 23 CHAIRMAN BROMLEY: I love your metaphors, 24 George, head-popping, wrapped around the axle. 25 haven't heard this for a number of years. It's great.

1 MR. LAPOINTE: Unfortunately, that's the job I work in. 2 3 (Laughter.) 4 CHAIRMAN BROMLEY: You're wrapped around 5 the axle a lot, are you? 6 Max, is your hand up? 7 This is probably an MR. PETERSON: Yes. 8 area that Bonnie is more an expert in, but let me 9 suggest that I think we have maybe tried to use public 10 involvement for purposes it's not designed for, when 11 you talk about something that has national 12 implications. I'm reminded by members of Congress 13 we're in а representative democracy 14 decisions that are of national significance 15 supposed to be made by elected representatives, not by bureaucrats who select a sample of the public and make 16 decisions based on that. 17 18 So do live in representative 19 democracy in the United States. So there's some 2.0 questions that should not be decided by the opinion of stakeholders, however defined. If they're of national 21 22 significance and involve national questions, they are 23 supposed to be -- in our society -- decided by elected 24 representatives in the democracy.

So just think about that as we think about

the public, and I think the whole idea of stakeholders is that a bureaucracy can only really deal with stakeholders, they can't really deal with the public as a whole. They're not set up to deal with the public as a whole, because they have trouble. So maybe that perspective, maybe Bonnie could help us a little bit as we write this whole business of how we deal with the public and stakeholders, because we are talking about different levels of decisions.

CHAIRMAN BROMLEY: Do you want to say anything, Bonnie?

DR. McCAY: Just briefly that I think "I respect what you're saying here, and I think the concern of Subcommittee Two is that we're aware, as everybody else here is, that MPAs are very, very difficult creatures to create and to maintain because there are so many different " as well as conceptive interests involved in them. And without getting the input of those, it's not going to work, no matter what Congress does.

MR. PETERSON: And I agree with that, and I think we agree in principle that unless the people directly affected have some level of support for it, it won't succeed. So you do have that group of "segment of the public who have "are directly impacted

	by it, who are different than ones that just have an
2	opinion on it. Right?
3	CHAIRMAN BROMLEY: I think the issue here
4	is, the shorthand version is: whose resource is it,
5	anyhow? We see this played out. I mean, if we want
6	to get out of the water, we see it played out in
7	Alaska, most profoundly in terms of oil exploration
8	and timber policy and other stuff. Whose resource is
9	it, anyway? And I don't have an answer for that, but
10	that's shorthand for the issue.
11	MR. PETERSON: The shorthand is that the
12	United States is made up of states, Mr. Chairman, and
13	that's where the fundamental responsibility was placed
14	under our Constitution, right?
15	CHAIRMAN BROMLEY: Unless there's a
16	national interest for something that happens to reside
17	in the state that begins with an A.
18	MR. PETERSON: Well, unless Congress "
19	unless there's a reserve to the Federal Government,
20	which originally was defense and coin and money and a
21	few things like that.
22	CHAIRMAN BROMLEY: Yeah, right, I knew I'd
23	get a fight if I mentioned it.
24	Mr. Benton from Alaska has a comment to
25	make.

(Laughter.	,)
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MR. BENTON: Mr. Chairman, as the only legitimate person to be able to comment " or the only person to be able to comment legitimately about Alaska, I'm just going to withdraw and withhold any comment.

CHAIRMAN BROMLEY: You're going to do what?

MR. BENTON: I'm just not going to say a thing. I just want to say one thing, which was, there was a very similar discussion that was going on one time between a group of folks that actually had much more direct influence on what was going to happen with Pacific salmon negotiations. I was the negotiator for the United States for Alaska on that, and I just reminded them that except for one small fluke of history, I would have been the fisheries master from one of the world's probably third largest nuclear powers, because we would have been a Soviet satellite state that was spun off at the collapse of the Soviet Union.

(Laughter.)

CHAIRMAN BROMLEY: Some state-side people would have said that "

Okay, enough. I think Mel Moon has been

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dying to get into this conversation. So, Mel?

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 $$\operatorname{MR.\ MOON:}\ Wow, what a conversation. It's hard to follow that one.$

Our group, we had a discussion about the original purpose of our function, and had some discussion on title and our goals. And I think we agreed that we would continue on the coordination of MPA efforts on a regional national level.

The first task that we were able to agree on was the Ocean Commission report. There was still a lot of concern about a document of that magnitude having some weight that would need to be understood it coordinated with as relates governmental coordination of MPA efforts. So created a subcommittee of two to three people who are going to develop a two- to three-page analysis and bring that back at the next fall meeting. So that will be assignment number one. It will be completed in the fall.

The next topic we had was on intergovernmental coordination and communication in particular. And we started out with the definitions of types, that being federal, state, tribal, and other. And then we progressed on to taking on some sub-titles of how to approach this. And the three

sub-titles were planning, enforcement and monitoring of MPAs.

Some of the things that we look at under these tiers would be for good representation and function of an MPA. We look for successful elements such as consistency, cost-effectiveness coverage. We discussed attributes of good coordination. We included an example of a real life experience such as — and in particular the Florida Keys was one that we had cited as a real life example, to be included. And then we would approach this in two sectional ways.

One would be under a national approach, and the other one would be under a regional. We developed a list of goals and fundamentals. And then we'd also approach this project with the coordination of this product in mind with Group Number Two in particular.

So as a result, we formed two working groups on this that would just take the attributes-of-success approach, and they were to be titled the intergovernmental coordination and creation of national system of MPAs, that is Group Number One. And Group Number Two was the operational coordination on regional levels. So we have assignments for these groups to go back and come back with some details on

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these discussions that we had outlined in our title.

The third item that we had a discussion over was on the concept of culture. And we had a previous assignment, before we left the last meeting in San Mateo, and we asked John Halsey to come back with a draft of the definition of culture. And he had done that, provided that draft to the Committee, and we reviewed it and we'll talk more about it today, with the emphasis being that we'll be able to provide this to the full Committee on Thursday.

And then we had a discussion about the full title of culture to some extent, feeling that it was a sort of a sub-set of the state and federal tribal definitions, and under tribal definitions culture kind of came up to the top.

So we think this is a broader issue that needs to be expanded upon. It needs to perhaps have another subcommittee focused on this. We had some discussions about perhaps meeting interim with a smaller group. Myself and John have been appointed to the cultural section. We'd love to have Bonnie join us in terms of future discussions. But perhaps we'll bring this back to the full Committee on Thursday, on the full creation of a subcommittee that may deal with this. So we're kind of in the midst of still having

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discussions right now about that.

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I would also like to inform the group that I've had some concerns about where the tribal aspects have fallen into the categories here, and I don't know if there's a real awareness that exists about the difference between our cultures. And we seem to get lumped up a lot of times as sort of a national type of thing. We're not national at all. It's very individual.

So Ι would like to work subcommittees, I guess a small group, to perhaps pull together a panel at our next meeting this next fall would deal with indigenous representatives to to the table and give a presentation about traditional knowledge, about the elements that they're dealing with in terms of Marine Protected Areas and science, and their culture. And you know, perhaps a representative from the Northwest, from Pacific Islands, from the Great Lakes, and from Alaska. These are areas where I know tribes have rights, treaty rights that secure their access to natural resources in Marine Protected Areas. So I just kind of set that out for everybody to consider, and whether or not we can report that at the Thursday meeting to forward.

1	And also, part of the cultural thing, we
2	needed to make sure that as a product as we moved on,
3	that we would certainly need to have some
4	connectedness with Groups One and Two. And we were
5	hoping to get perhaps a subcommittee, to finally get
6	there, have some representatives from each of the
7	committees. That's it.
8	CHAIRMAN BROMLEY: Very nice. Thank you,
9	Mel.
LO	Questions, comments. Yes, Rod, and then
.1	Wally.
_2	DR. FUJITA: Thank you, Mr. Chairman.
.3	Mel, is your subcommittee planning to
4	develop some recommendations for monitoring and
.5	evaluating regional and national networks of marine
-6	reserves, or MPAs?
L7	MR. MOON: Yes. There were certain
-8	attributes that we wanted to look at that were
L9	experiences that have been gained from other places,
20	and I guess the title that we're going to look at is
21	basically just the successes that have happened from
22	that, and then to tie that in with the national
23	creation of MPAs.
24	CHAIRMAN BROMLEY: Wally?

DR. PEREYRA: Thank you, Mr. Chairman.

Mel, I'm very interested in your comments about how we deal with the native American side of this particular issue. Will you or your committee be giving thoughts to how you would coordinate or enter the interests, concerns of the native American groups I'm thinking, for example, of within the regions? We got Akiachak, Yupiit, Aleut, Kwakiutl -- I mean's there's " and they all have different ways of with dealing the marine environment, the and importance of it is different in different cultures, inter-regionally. And this can become quite task, to have this represented awesome to try properly. And I'm wondering, are you going to be giving some thought as to how that's handled in a "in some kind of a systematic way so it's properly represented?

MR. MOON: Obviously the cross-diversity is enormous and to try to get a subsection will be a task that we'll have to undertake to try to get "you know, you're not going to cover everybody, but you're going to try to get at least enough pieces of an awareness for the purpose of understanding from this forum here to understand the rights, understand the approaches, understand the diversity. That's the goal.

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CHAIRMAN BROMLEY: Good. Other questions, comments? Yes, John?

DR. HALSEY: I just wanted to say that

what we have in hand at the moment is basically recasting of the existing Federal standards for the National Register of Historic Places which is thirty years old now, and it's been well tried and tested in terms of determining what you would call the durable kinds of cultural resources that are out there, the man-made structures, the shipwrecks, the built environment -- as it were -- that exists under water.

And I was doing this with the hopes of maintaining consistency with existing definitions and so forth, so that we're not reinventing a lot of things there. And there exists in the Federal standards definitions of cultural significance and how to go about assessing these things.

CHAIRMAN BROMLEY: Good. Bonnie?

DR McCAY: First of all, I'm really interested in this idea of the panel. I think it would be great, even just to communicate that there is cultural diversity, and that it can be very profound and important.

In relationship to the issue of Federal

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definitions and so forth, I'm wondering, we haven't even discussed the environmental justice, and culture is certainly connected to issues that are included within the environmental justice Executive Order and so forth.

But my take is quite other, and it's -Subcommittee Three, I'm wondering how you have thought
about "we too have thought about the system idea and
how one "what is involved in monitoring and evaluating
a system or a network, where there's programmatic or
functional or regional? I know most of our thought
has been focused on a particular Marine Protected
Area. So have you thought about this issue of
evaluating a complicated system, inter-jurisdictional,
et cetera?

MR. MOON: I guess the "I mean the interjurisdictional did come up, and we had "and actually was played in in terms of the title, you know, renaming ourselves in terms of that, but I think we went back to the coordination and the communication as the key description of what we were doing.

I suppose we're going to have the Committee get back together and have more dialogue about the national versus the regional approaches, and deal with some of those topics such as function and

1	whathot, and activities that happen within the MPAS,
2	and we'll see what they come back with.
3	DR. McCAY: I guess what I'm thinking of
4	would be indicators for the effectiveness and so
5	forth, if we're thinking about the system.
6	MR. MOON: Oh, definitely. I think it's
7	about the successes of functioning MPAs and those
8	parts, those attributes that make it work, that make
9	it functional.
LO	CHAIRMAN BROMLEY: Lelei?
L1	MR. PEAU: Mr. Chairman, I have a quick
L2	comment and a procedural question.
L3	Mel, is your thinking on the cultural
L 4	panel, are you restricted to members here, or are you
L5	inviting folks from different jurisdictions?
L6	MR. MOON: On the "
L7	CHAIRMAN BROMLEY: For the fall meeting,
L8	which panel "
L9	MR. MOON: I would encourage that those
20	who have an interest and some expertise, I would
21	welcome them to join us in the planning of that. If
22	it's agreed to by this forum that that's something you
23	want to do, then I would welcome that.
24	MR. PEAU: On a procedural matter, Mr.
25	Chair, if you could clarify, what is the procedure for
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a subcommittee requiring the Center to conduct some work? Are we allowed to go directly to the Center? I'll give a specific example.

There are ongoing inventories MPAs conducted with the system from the Center. Since we are "we've been spending a lot of time discussing the monitoring attributes and characteristics. Subcommittee Two, during our deliberations yesterday, did bring up the fact that -- I'm certain you would like to see some analytical review conducted on the outcome of those inventories. Not knowing the time frame and not knowing the sources available to the Center, but I think instead of us re-inventing the think wheel, it's really important that Ι we capitalize on the existing resources and those studies, and then perhaps whatever caps or issues that have not been addressed is something that we'd like to maybe focus our limited resources to assist the I'm not really quite sure of Center. But procedure. Are we allowed to go directly, or do we have to come to this Committee as a whole?

CHAIRMAN BROMLEY: I'll get expert opinion here in a minute on that. My guess would be that you are not allowed to go directly to the MPA Center. Whether we as a full Committee "I mean everything the

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subcommittees do, back to my answer to Dave Benton, first of all has to be ratified by us. I mean, we have to say, "Yes, that is a good task. We agree with that work plan." Then the question is, can you "can we do that, and I knew that I'd get the answer to the larger question, and here it is.

Role of the MPA Center staff. staff are available to the FAC and its subcommittees as subject matter and resource people. With the exception of the Designated Federal Officer, they do not serve as staff to the FAC, okay, its subcommittees. Staff may be assigned by the MPA Center or the Designated Federal Officer to perform specific tasks to facilitate FAC -- that's us -- and subcommittee meetings such as notetaking.

I now would like somebody to tell me what that means.

(Laughter.)

MR. URAVITCH: Mr. Chairman, I guess the question is, what is the question that needs to be addressed, and in what time, because we obviously have limited resources and we're not in a position to provide ongoing staff support for every question raised by every subcommittee or the full Committee. We're certainly willing to work with the Committee and

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the subcommittees to try and advance the process, because that's of interest to all of us. But I think that would be subject to discussion, and I think it ought to come through the full Committee and the Chair, and then we could negotiate on that and see what's realistically feasible.

CHAIRMAN BROMLEY: Operationally, I would imagine that if Subcommittee Two or any subcommittee has a substantive issue -- as you raised, Lelei -- that it would come to the full Committee, we would want to hear your reasons why this was necessary, where you were going to plug it in, and then we would have to decide whether we want to go to Joe and the other responsible officers and perhaps negotiate what might be done. I mean, I would imagine, Joe, that MPA staff could "the Center staff could point them in lots of directions. They could say, "Gee, you know, you people are much closer to the literature that's out there, you could serve as a resource that way," without actually doing the work.

Is that right?

MR. URAVITCH: Yes, that's correct. And there are obviously certain things we're willing to take on, like yesterday we agreed to make sure that we look through the Commission Report when it came

through, pull out relevant sections and make that information available. I think it's the more detailed analytical work that would be difficult for us to undertake. And one of the things we're looking for the Committees to perform, are recommendations on the kinds of things we ought to be doing.

CHAIRMAN BROMLEY: Is that okay, Lelei?

MR. PEAU: Yes.

CHAIRMAN BROMLEY: It doesn't mean you shouldn't "your subcommittee should not go ahead and develop a list of what you think you'd like to have and bring it to us.

MR. PEAU: Can Ι make one quick When the idea of observation? the national MPA inventory was " came about, there was some real serious discussion in the Islands in terms of capturing some of the traditional practices in MPA. I felt strongly on inclusion of those MPA, with the understanding that this will somehow help this group to guide the objectives so National MPA that there is representations and acknowledgment of those existing traditional practices. I'd be remiss if again not reiterating the significance of having those sites available so that we can deliberate at the national level and make sure that the national policy has some

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1 acknowledgment of those existing resources. So I'll stop there, Mr. Chair. 2 3 CHAIRMAN BROMLEY: Good. Okay, thank you 4 Barbara? 5 MS. STEVENSON: Yeah, I want to go back to the cultural section for a moment. We talked about 6 7 this a little bit in Subcommittee Two yesterday. 8 I'm very concerned that the discussion 9 here sort of is focusing back down on both the 10 physical cultural and a significant -- but only a part of the entire cultural context that we'll be dealing 11 12 in. I just want to make sure that the Committee understands that there are cultural differences that 13 14 go beyond native American, and that we need 15 recognize, when we're dealing with how to manage these MPAs, that the cultural differences in the rest of the 16 population are recognized and dealt with. 17 18 I understand that. MR. MOON: There is a 19 broader context to do with the cultural theme and it 2.0 deals with all levels of cultural, physical and " and so that is going to be continued and that's the 21 22 purpose of the subcommittees. 23 panel is just for The other our 24 understanding and our education about, you know, who

are these people and how do they deal with their

problems, which are different than how you usually deal with them. So it's just an education process.

CHAIRMAN BROMLEY: Rod?

DR. FUJITA: I just want to clarify, because I'm still a little unclear on how and who will develop the indicators, the monitoring protocol, and the recommendations for how to monitor and evaluate a national and regional network of Marine Reserves.

Mainly because Subcommittee Two was thinking about doing that, but I'd like to get that off our work plan if we can.

It occurred to me that maybe it would be more appropriate for Subcommittee One to communicate to Subcommittee Three "

(Laughter.)

DR. FUJITA: "some attributes of systems that are different from the properties of individual MPAs that would be important to monitor. Mark Hixon has a very good understanding of those issues of productivity and spacing and total network size, those characteristics of the system that are different, that need to be monitored in a different way, and then maybe Subcommittee Three could work out the details on how to coordinate Federal and state activities as they carry out that sort of monitoring plan.

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1	CHAIRMAN BROMLEY: Good. Thank you.
2	George?
3	MR. LAPOINTE: My comment was building on
4	Barbara's, that in fact I like the idea of Mel's panel
5	to discuss the diversity among indigenous interests.
6	And we just need to recognize that among fishing
7	communities there's an equal diversity, you know, and
8	we can all talk about that; we don't need to, but
9	that's an important thing for us to pay attention to.
10	CHAIRMAN BROMLEY: Bonnie?
11	DR McCAY: I pass.
12	CHAIRMAN BROMLEY: You pass. Okay.
13	I think in view of the clock, our final
14	comment from Tundi.
15	Are you passing, Tundi?
16	DR. AGARY: I'd like to defer to Mark.
17	CHAIRMAN BROMLEY: Okay, Mark.
18	DR. HIXON: To respond to Rod very
19	briefly. What Subcommittee One has done regarding
20	networks is to provide a definition in the glossary,
21	because networks are referred to in the vision of
22	goals statement. So that will be available on the web
23	very soon, if not sooner.
24	CHAIRMAN BROMLEY: Okay. Tundi?
25	DR. AGARY: I have a question that
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1	probably is premature and may be just food for thought
2	for Subcommittee Three, but I wondered as you're
3	talking about regional coordination whether you leave
4	open the opportunity for advising NOAA on how to make
5	itself amenable to international cooperation,
6	particularly as we have some regions in the United
7	States that would require international cooperation to
8	effectively manage those marine areas.
9	MR. MOON: Actually, that's a good subject
10	matter, and we have not discussed internationally
11	important issues, but I think that's a good one to put
12	back on the table.
13	CHAIRMAN BROMLEY: Okay, Jackie, did you
14	want to say something?
15	MS. SCHAFER: Just to reassure Tundi that
16	we will certainly try to bring some of the expertise
17	of the U.S. Agency for International Development,
18	which works internationally in a number of places
19	overseas in these particular areas, and we'll be able
20	to address those concerns as we move ahead.
21	CHAIRMAN BROMLEY: Good, thanks. Thank
22	you.
23	Before we break, I'd like to make an
24	operational suggestion and ask you how you react to
25	it. I thought I had agreement yesterday among the

three subcommittees that two individuals from each would meet this morning at 10:15 as a sub-subcommittee to hammer out the culture issue. And then I thought I heard Mel say that you guys had one worked out that you'd like to present to us tomorrow morning. Do I —that I misunderstood you.

And then this morning your suggestion that at the fall meeting we have a panel on culture triggers the following thought, and then I think I heard that John Halsey had a definition. Subcommittee Two has a definition. And the question I have is, if we want this on our panel in the fall, what I'd like to see would be this group of six, two from each, if I may, meet now instead of with their subcommittee, to both come up with one working hypothesis about what it is we're going to consider culture to be, and that you also give some thought to what this panel might look like, because tomorrow morning we have to plan in a rough way what our agenda will be for the fall, and if you want to have a panel on culture, which I think people seem interested in having, we'd like to have some parameters as to how many people that might be, who they might be, what interests will be represented, and what have you.

So did I misunderstand, Mel, when you "

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1	MR. MOON: Actually, the problem is just a
2	matter of too many meetings and not enough need. And
3	there's some problems in our committee because our
4	Vice Chair has left us. The Committee is chairless,
5	per se, and there are some other problems with
6	Committee Number Two they have some business that
7	they'd like to go back and address, too. So it's a
8	coordination issue that's creating the problem.
9	CHAIRMAN BROMLEY: Right. I understand,
10	and I knew when we thought about that this was
11	going to take the Chair of Subcommittee Two away and
12	the Chair of Subcommittee Three, and this is probably
13	not a good thing. But Mark, go ahead and then I'll
14	follow up.
15	DR. HIXON: Thank you, Mr. Chairman.
16	My concern about this is it's basically
17	sort of decapitating all three subcommittees to create
18	a temporary subcommittee. I know the members of my
19	subcommittee are in the midst of grappling with some
20	very difficult issues, and frankly no one wants to
21	miss out.
22	CHAIRMAN BROMLEY: Right, I understand
23	that.
24	DR. HIXON: And given the diversity of the
25	public within our subcommittee, we want to keep it

1 | intact if we can.

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CHAIRMAN BROMLEY: Bonnie?

DR. McCAY: And I think that we can discuss the ways that we want to define culture via email quite adequately. There's nothing contentious here. So I don't see that that's a problem. The planning I would hope we could do that way as well.

CHAIRMAN BROMLEY: Okay.

MR. MOON: There are two pieces, obviously, the panel and then there's the formation of another committee. And my suggestion was that we should review the formation of another committee or subcommittee. Maybe that's something that needs to be decided by the full Committee. That's just a suggestion.

CHAIRMAN BROMLEY: That's fine. I'll back off of that.

So let's go into our three subcommittees. I do believe that it would be nice tomorrow if you want to come forward with a sort of a formal motion about a substantive piece of the program in the fall; i.e., a panel on culture, that sometime this afternoon -- when you're on the boat and not in the water -- that those of you that "let's call it the cultural coalition here " do some homework and be ready in the

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1	morning to bring to us a proposal about a panel and
2	some general parameters of who might be on it, not
3	necessarily names, but the kinds of people that you'd
4	like to bring forward. And so, if that's okay?
5	John?
6	DR. HALSEY: As a practical matter, would
7	it be possible " how do we get these people to wherever
8	it is we're going? Are they going to have to pay
9	their own way?
10	CHAIRMAN BROMLEY: No, I believe there's
11	funds. If you pass on dinner tonight, we'll be able
12	to "we'll have some money to bring people to wherever
13	it is we plan to meet.
14	(Laughter.)
15	CHAIRMAN BROMLEY: I believe there's
16	funds, yes. There is money. Okay.
17	So, let me just remind you. We're going
18	to break now. I'm going to leave it to the three
19	subcommittee Chairs to get your people mobilized at
20	exactly 10:15 so that I don't have to do this, and
21	we'll meet in the same places that we did yesterday,
22	and "right, that starts at 10:15, and at 11:15 we need
23	to be in this room ready to receive our panels.
24	John?
25	DR. HALSEY: What's the drill on departing

1	for the snorkeling trip?
2	CHAIRMAN BROMLEY: The drill is "Lauren?
3	MS. WENZEL: What we ask people to do is,
4	after the panel discussion, we're going to have your
5	box lunches out here by the door and then you'll walk
6	out and the boat is just across the canal here. So we
7	can take you across. It's a five minute walk. But we
8	need folks to be ready to go. It looks like a few
9	people obviously need to go change, so we'd ask you to
LO	do that quickly after the panel discussion, come down
L1	here, pick up your box lunch, and we'll walk together
L2	to the boat.
L3	CHAIRMAN BROMLEY: And we should meet for
L4	the walk sort of right out here; is that right?
L5	MS. WENZEL: Yes.
L6	CHAIRMAN BROMLEY: Okay.
L7	(Whereupon, the meeting was recessed until
L8	11:15 a.m.)
L9	CHAIRMAN BROMLEY: I'm going to ask Joe to
20	introduce the speakers and the panels.
21	MR. URAVITCH: Okay, thank you.
22	One of the reasons we came or asked the
23	Advisory Committee to come down to the Florida Keys
24	is it's probably one of the premier, if not the
25	premier example of intergovernmental, inter-program

cooperation in the United States today. It's been a long and complicated process and continues to be, and it was one I was involved with in the early 19 " late 1980s, early 1990s, and it's good to see how well it's done. It's certainly done more than I ever suspected people could do.

You see a good example sitting here of what it takes to make this happen, and this is probably half the organizations that could be here at the table talking about what they do, but these are certainly some of the major institutions that are involved. I thought maybe the best thing to do is start off by introducing Billy Causey, who's the Superintendent of the Florida Keys National Marine Sanctuary, which is what first brought us here, and let Billy introduce the rest of his colleagues who he works with on a daily basis, and let you guys run the show, given that we have a limited amount of time and I don't want to talk too much.

So, Billy Causey.

MR. CAUSEY: All right, thank you very much, Joe. And again, I want to welcome the Committee to the Florida Keys and to South Florida. It's great to have you all here.

To my left, far left, is Superintendent

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Linda Canzanelli with the Biscayne National Park, and Linda is just up the road from us. Once we get our map up we'll be able to give you some geography and give you a South Florida geography lesson.

And then to my immediate left is Bob Howard, who is Resource Manager with Everglades and Dry Tortugas National Parks.

To my right, immediate right, is Kacky Andrews, who is the Director of the Department of Environmental Protection's Coastal and Aquatic Managed Areas.

And then next to Kacky is Eric Kiefer,
Park Manager for John Pennekamp Coral Reef State Park.

And to the far end is Dr. Bill Kruczynski, who is with EPA, and Bill is our resource " or he's the project scientist for the Water Quality Protection Program for the Sanctuary here in the Keys, working for EPA.

What we're going to do is, we're just going to talk five minutes, and those of you that know me, that's a challenge for me. But what we want to do is point out the kinds of partnerships that we've established here in South Florida and how we work with one another. For the NGOs and the non-governmental groups and the scientists that we work with, that any

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of us work with, I'm going to say up front we're not talking about those partnerships, but more the interagency partnerships and the way we work in an integrated way here in South Florida and the Sanctuary.

Our history in the Florida Keys goes back some time with the State of Florida. The Florida Keys National Marine Sanctuary at this point in time is 2900 square nautical miles in size, and 60 percent of the Sanctuary lies in state waters and 40 percent in Federal waters. I'm not going to talk as much about that partnership, because Kacky is going to be discussing that directly. But it goes back to in the early 1980s when John Pennekamp Coral Reef State Park managed all the way out to the outer reef tract, Molasses Reef where we're going to be going today on the field trip, and that was beginning in 1960, in December of 1960, state waters. And in 1974 the territorial sea limit was rolled back for the State of Florida, back to three nautical miles, which left the Pennekamp Park unprotected. In 1975, the Key Largo National Marine Sanctuary was designated to take over that area.

The state continued to manage the Key Largo Sanctuary, and then I started managing a little

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tiny key National Marine Sanctuary in 1983 down off of Big Pine Key. And that sort of laid the ground work or the framework for a state-Federal partnership that goes back to the early 1980s. Today we've continued that kind of relationship, but we've expanded it to other areas.

The Florida Keys National Marine Sanctuary overlaps six state parks, three aquatic preserves, four wildlife refuges, and within this boundary we have all these multiple agencies that have various jurisdictions and authorities, and it's critical that we work with each and every one of them.

also adjoin and have contiquous boundaries with the Biscayne National Park to the north of us, as well as the Everglades National Park which is to the north of us on the bay side, and we surround the Dry Tortugas National Parks. It's critical that in order to manage, using the kinds of approaches that we use, such as ecosystem management approaches, that work together we in coordinated way, in a very integrated way. several different bodies that helps us do that, at both the national level and the local level.

We have the South Florida Ecosystem

Restoration Task Force that all of our agencies are

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members of at both the national level, and then we have locally a working group that all of our agencies are represented on, and we also have the tribes, local governments and other agencies.

We also have the U.S. Coral Reef Task Force that again, each of our agencies are represented on the U.S. Coral Reef Task Force, but we in the field also have responsibilities and activities that we integrate with on a regular basis.

And then of course we have own initiatives, and Bill Kruczynski will touch on some of the things that we're doing with EPA.

With that, I'm going to go ahead and pass it on to Superintendent Canzanelli, but I want to point out we're trying to stick to five minutes each, and then we want to open it up to Q and A's.

To punctuate what I was saying, you may have heard about the Tortugas Ecological Reserve over the years. In order to establish that 151 square-nautical-mile area we had to work with seven different jurisdictions. Four of those jurisdictions had veto capability on the process. The last two steps in the process were to go to the State Fish and Wildlife Conservation Commission, and ultimately to the Governor and Cabinet, sitting as the Board of Trustees

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over submerged state lands. And those were the two last critical steps, and we in fact had unanimous support every step of the way, which was very gratifying to us.

Can we do it again? I don't know, but as long as we are talking and as long as we're integrating our activities, I feel confident that we can.

Now I'll turn it over to Linda.

MS. CANZANELLI: Hi. It's great to be able to be here today.

Biscayne National Park is a smaller park definitely than Everglades, and one of the things that " the only way we can survive and the only way we can do things is really through partnerships. So partnerships are really our life blood in the park. And we have quite a few important partnerships in this area, but probably the one, given I'm on limited time, that I want to talk about at least first is our partnership on the development of Fisheries our Management Plan.

Biscayne National Park was established in 1968 as a national monument, which makes us 35 years old last year, and we "the park was established in two parts. It was expanded in 1980 when it was turned

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into a national park. And when that happened there was a north and south component added. Well, the original component of the park, which is the center core, basically the enabling legislation says that the Secretary of the Interior shall consult with the state, and then pretty much they can go off and do whatever they want in that area.

When the north and south areas were added in 1980, the state retained fishing rights in those areas of the park. So the park is very segmented. Now Biscayne National Park is 173,000 acres, 270 square miles. We are Miami's front door. And it is virtually impossible for people to know when they are in the park.

One of the challenges we have -- the Trust for Public Land recently did a poll of people, asking people, did they go out to Biscayne National Park and all those questions. Something like ten percent of them said yes, they went out to Biscayne National Park. They asked them, do you go out into Biscayne Bay. Something like eighty percent of the people said yes. They asked them where they liked to go in Biscayne Bay, and the places they mentioned were Boca Cheeca, Elliot Key, all places in Biscayne National Park.

So obviously they don't know that they're in Biscayne National Bank when they're in Biscayne. So that's one of the challenges.

Well, even though we're thirty-five years old, nobody had ever done -- and 95 percent water -no one had ever done a Fisheries Management Plan at Biscayne National Park. Unfortunately, when the rest of the Florida Keys system was planned in a fisheries So we were left to plan, Biscayne was not done. either do it our own or to partner. And I felt really strongly that we needed to partner with the state. Ιf people don't even know when they're in the park, one of the worst things we could do was to go off on our own and establish a bunch of fishing regulations not in conjunction with the State of Florida, and then have only a limited number of people being able to enforce them. Basically my law enforcement folks would have been the only ones who are able to enforce them.

So we entered in -- with a Memorandum of Understanding, we entered into an agreement with the Florida Fish and Wildlife Conservation Commission in 2000 to do a Joint Fisheries Management Plan for Biscayne National Park. This has turned out to be so many benefits that I never ever, ever, ever

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anticipated. It makes me feel brilliant at times for having suggested the idea in the first place. And it's really been a wonderful relationship. Because of all the science that we're using as part of this, it's being peer reviewed, the state is part of all that, and because of their involvement "we aren't even finished the plan. We're hoping to finish the plan this year. But because we had already presented such information about lobster mini-season and lobster take within the park, that the Florida Fish and Wildlife Conservation Commission voted to change -- before the lobster mini-season in 2003, they voted the lower the legal number of lobster that could be Biscayne National Park from twelve to six a day in advance of it, because of this partnership and the coinvolvement in it.

In addition, one of the great things has been "I don't know how many of you know about the Federal "my least favorite thing that Congress ever did, which is pass FACA, the Federal Advisory Council Act, the Park Service does not have "we only have a very limited number of "and I always rant about this in front of -- including to Congressional visitors who come down here. It's my favorite rant. We aren't able to bring together groups of people in order to

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consult them and to use them to help to advise us on policy. And I really think that a park like Biscayne -- where we are Miami's front yard -- it's phenomenally important for us to be doing that.

And so what we did, because of this partnership is, I asked Billy if he would be willing to let us use a committee of the Sanctuary's Advisory Council, Advisory Group, to use to be our Advisory Group on this Fishery Management Plan so we could get even more in depth input from folks than we were doing as part of just our public scoping. And we were able partly to get around FACA by the fact that the state was our partner in this. So really they're doing this with the Sanctuary. They're not advising me, they're advising the state, who then passes the information on to me. It's a nice "it passes the red face test.

But it's really been a phenomenally important and valuable partnership that's had lots of unexpected and really valuable benefits to the Park Service, including looking at the fisheries more holistically, so we're not looking at it just within the geographic area of Biscayne National Park, but we're looking much broader, regionally, on how we can benefit fisheries.

And I'll end there.

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MR. CAUSEY: Thank you very much. You have a minute.

Now we'll hear from Bob Howard with Everglades National Park. Bob?

MR. HOWARD: Good morning.

Our new acting Superintendent, Dan Kimble, was not able to be here today, because he had scheduled all-employee meetings, where he was going to meet all of his employees. So it made it very difficult for him to get out here, but he regrets not being here with Billy and the panel.

I'll start very quickly with Dry Tortugas, in that a general management plan was done about four years ago, three years ago, and it was in conjunction with the Sanctuary for the Ecological Reserves. That was where I think there was a real beginning of a close working relationship, even though " and that partnership out there has extended on to the Sanctuary and the state officers coming out to the park and assisting us with law enforcement in the park. We have such a small staff out there, that when Billy can come out with his ship, or the Fish and Wildlife Commission officers can come out with their ship with five guys on it, you can really get the attention of some of the fishermen out there. And there have been

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some fabulous cases, I think, done.

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But Billy asked me to talk a little bit the South Florida Ecosystem and more about comprehensive Everglades program and what effect that that has on the marine environment for the park and Now as you well realize, that's a the partnership. local interest, the state huge partnership. The interest, the other Federal interests, commercial and all environmental groups and individuals are participating in that. And I could spend a lot of time talking about the fresh water component of that, but as all of you realize, eventually it dumps out into the Gulf of Mexico or, more directly, in the Florida Bay, and then that all, the flow through the Gulf of Mexico comes right on through the Sanctuary, comes through Pennekamp, comes through a lot of state property down south of the park.

That I think really makes the Everglades
Restoration Program, the South Florida Ecosystem
Program, such an important program from a Marine
Protected Area perspective. I think what that allows
us to do is that fresh water, salt water, very
productive estuary system allows for a real prolific
increase in fisheries and sea grass and other things.
As all of you know, though a lot of people will talk

probably about the ocean side, the Atlantic side, for the Sanctuary and a lot of the Keys and for Florida Bay, what goes on in the Gulf of Mexico, what goes on more locally or regionally up in Tampa and Fort Myers, very, very much has an impact on the Keys. Billy's got a great Sanctuary map that shows you these eddies where the loop current comes in and around the Dry Tortugas and then starts this big eddy that brings all of these water quality issues to Everglades National Park, to the Sanctuary, to the Keys, to the coral reefs.

So the partnerships that we have to work with, I think, are just critical. Billy has been a real focus with us, the working together I think has been a real success.

MR. CAUSEY: Thank you. I only brought people together that would say good things about our relationship.

(Laughter.)

MR. CAUSEY: Now it's my pleasure to introduce my co-trustee. Kacky is my co-manager in managing the Florida Keys National Marine Sanctuary, and she's going to explain how that came about between the Governor and Cabinet. You've heard us talk about state/Federal partnerships. Two-thirds of my team, or

our team here in the Keys, are state employees, either with DEP or with the State Fish and Wildife Conservation Commission, and NOAA funds 99.9 percent or something like that. I'll let Kacky explain.

MS. ANDREWS: Thanks, Billy.

Just to give you а little bit of The Governor and Cabinet, and the Cabinet is three other elected statewide officials, act as a Board of Trustees over all of the sovereign lands in the State of Florida. So that is why, since most of the Sanctuary waters fall in the state, the Governor and Cabinet had keen interest when the а very Sanctuary was getting created. And it had to go to the Governor and Cabinet for approval.

There was, you know, a certain level of discomfort, I think, in the Keys, it's fair to say, when this was first getting created. And so as this was moving through the Governor and Cabinet, the Governor and Cabinet asked for about, I think, eleven different MOA's or MOU's or agreements to get worked out before the state signed on. But that gave the state the level of comfort and also a certain level of buy-in into the process, so we would be active comanagers with the Federal Government in this area, and which has spawned just huge benefits into the future.

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How this works on the ground is, you know, you say well, as Billy pointed out, we have a bunch of eighteen, I guess, DEP employees working down here in the Sanctuary with the Federal employees. It's not that you have like the Federal Sanctuary Building and then the State Sanctuary Building. They're in the same buildings. They're in desks next to each other. They work side by side, and they all have the Sanctuary logo on their shirts. And so it really is a true partnership, a true working together in the most basic terms.

Once a year we drag Billy to Tallahassee and we put him up before the Governor and Cabinet and give them an up-date of all we've done. The Governor, Governor Bush invariably asks, "How's the Tortugas doing? Is it working?" And we're pleased to say, "Yeah, the indications are good."

But as you can see, with all the different jurisdictions sitting up here, and we have different authorities, we have different legal requirements, we have different policies, are there disagreements? You bet. But you know, we work through them. It's incredibly easy "it would be incredibly easy if we were all defined by our differences. Everybody at this table refuses to be defined by the differences.

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We insist on being defined by the similarities of what we're all trying to do. And so when we have those disagreements or when we get to those points where our jurisdictions aren't matching up real well, we work it out. And it's basically that simple.

And that's all I had. Thanks.

MR. CAUSEY: And now we have Eric Kiefer.

MR. KIEFER: I'm Park Manager at John Pennekamp, and I guess that's kind of the original partnership that started this whole thing, whereas we are part of the Sanctuary but managed under the state park system. And it's really been working out phenomenally. We have no problems there.

Actually now what we're trying to do is kind of integrate more and more together. For instance, one of the things we're looking at the feasibility of now is trying to get the state park officers brought under the same guidelines as the Federal officers and use some of their procedures to garner back some of the damages caused to the reefs and the sea grasses that we have.

In the state park system to -- if you run aground and destroy a reef, what we have to prove is that you meant to do it, you criminally meant to do that, and charge you with a felony, and try to get

some money from you and then, you know, for the damage assessment, which kind of goes up into another big pot. The way they do it in the Sanctuary is, you know, all we're trying to do is recoup the cost to restore the resource, and to recoup it right here in the area and use that money to repair what's been done. And they've been real effective at that and they have a really great system. And so the state parks is now trying to "and it hasn't been done yet, hasn't been finalized, but the feasibility is being looked at to do that. So that's going to be real helpful to us, to keep the resources protected.

We do a lot of "we rely on the Sanctuary a lot for expertise and for training. When we do things that "you know, when we're doing things that we don't have the expertise in, we can always go to them and they "Reef Medic is one program they run. I have all -- my staff is certified in that. They do a lot of really neat ideas, getting out patrolling the reef in a friendly manner. We've been through that program -- it's called Team Ocean.

So there's just a lot of ways that we work together. Other inter-agency cooperation we've done.

The Florida Keys Environmental Restoration Trust Fund is an organization where we're using their funding and

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funding through the Army Corps of Engineers, and mitigation monies are restoring a lot of mangrove habitat, actually taking the land that was completely developed and tearing down the developments, and then putting the original habitat in there, the Dispatch Slue, Cary Sport, Egret Island. At Egret Island we're also doing a lot of sea grass restoration, and that's with them. Of course we work with the FWC in a lot of law enforcement areas, including lobster trap removal.

So the last two things that I think I can talk about just in cooperation is something that's kind of brand new, it's called the Southeast Florida Park Area Managers Organization, and that's just everybody at Biscayne and Everglades, all the parks around, and we just kind of get together and try to figure out what we can do so we're all on the same page and how we can improve, because we all are connected. And so we are constantly trying to reach out and see how we can integrate and keep things working on a consistent level.

And a new thing they just started. We've had problems out here with people parking their boats and dumping the sewage out of their boats into the water. And that's not allowed in Monroe County, but it's kind of hard to enforce, and it's kind of hard to

1	catch them at it. And so what the Sheriff's
2	Department has now done is, they've decided we're
3	going to go around with a boat. I think this is
4	pretty much done now. And they're going to get a boat
5	and actually go up to these people and say, "Hey,
6	we're here to take your sewage," and then they'll
7	bring it to Pennekamp where we have the facilities to
8	dispose of it.
9	So all in all, the partnerships with
10	everybody here and the way things have been " the
11	ability of everybody to work together and willingness
12	has been " it's really great.
13	Thank you.
14	MR. CAUSEY: Thank you, Eric.
15	Now we have Dr. Bill Kruczynski with EPA.
16	DR. KRUCZYNSKI: Welcome to the Florida
17	Keys. This is a great time of year to be here. The
18	humidity is low and the mosquitoes.
19	I can only remember one other time talking
20	to a group this large without an overhead projector,
21	and that was my daughter's wedding.
22	(Laughter.)
23	DR. KRUCZYNSKI: So I feel a little naked
24	up here.
25	We're active partners with NOAA in

management of the Florida Keys National Marine It came about through the Act. Sanctuary. When Congress passed the Florida Keys National Marine Sanctuary Act, it recognized that water quality was key in keeping the biological communities in the Keys at some level of productivity, and that sea grasses and corals, the two major biological communities here in the Keys, are sentinels of water quality and generally don't well do when quality water deteriorates.

So when the Act was passed in 1990, it directed EPA, Congress directed EPA to develop a Water Quality Protection Program for the Florida Keys. We weren't exactly sure what that was, but we did it, and it took about six years to figure it out and do it.

In 1992 Congress said that EPA and the State of Florida should be partners in the management of this Act, or the application of this Water Quality Protection Program, and so we've been working together with NOAA and the State of Florida, trying to improve water quality in and around the Keys.

We finalized what we called the Water Quality Protection Program document in 1996, which has about 95 activities listed in it that need to be accomplished in order to improve or maintain good

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water quality in the Keys. And that Water Quality plan Protection Program or document then was incorporated in the Sanctuary's Management Plan. When finalized their EIS on management Sanctuary, water quality was part of that "it is part of that management plan.

All of the history of getting to where we were with the implementation of the management plan, including the Water Quality Protection Program, is in the document called First Bi-Annual Report to Congress, and I brought about ten copies with me. If you'd like to have those, you're welcome to them.

In the Act also, it says that we would develop a Steering Committee and a Technical Advisory Committee and a Management Committee for the Sanctuary. So we're on the Management Committee and our Act is helping manage the Sanctuary.

An example of that would be the joint development of a science plan a couple of years ago, a comprehensive science plan where EPA and NOAA worked together to do that.

One of our tech members is on this panel,

John Ogden, who's been very active on the Technical

Advisory Committee which keeps us scientifically

straight in the process, or tries to.

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(Laughter.)

DR. KRUCZYNSKI: The Steering Committee consists of high level officials in all of the agencies that are involved in the program -- state, local, Federal -- and the movers and shakers trying to get things done. Once the planning is in place, then they can help get things done.

Some of the things that we've accomplished in the last five years, we developed a No Discharge Zone for Key West, where sewage is being pumped out and no longer discharged into waters. We did that in 2000 and 2002, July, we did that for all of the state waters surrounding the Sanctuary under the Clean Water Act.

I helped, along with others, develop a Wastewater Master Plan for the county. So we have a master planning process in place, trying to clean up sewage problems in the Keys. We developed a Stormwater Master Plan. For those two main planning documents, about three million dollars worth of planning are in place, and now we're trying to fund the various individual components that need to be done to make those improvements.

Part of that process, EPA put about a half a million dollars into the system to test on-site

systems, something that people can add to their septic tanks that will allow "that will stop contamination of groundwaters and ultimately surface waters.

We have a pilot project on the ground right now that's going to be "that pipes are going to be turned on in the next three or four months in the Little Venice area in Marathon, where we put about \$4.3 million of construction grant money into an AWT demonstration project, а central collection and treatment system, which will take about 500 or homes that are almost all on septics in the Keys and give them a central treatment system. The way that works is when these homes were developed in the '50s they just dug a hole in the ground, and when people flush their toilet it goes into this hole in the Because the water level is so close to the ground. surface here in the Keys, the interchange between groundwater and surface water is very quick.

We've been active partners in the development and implementation of a comprehensive monitoring plan in the Keys, where we annually monitor the state of coral at 44 stations or so. Water quality, we do quarterly at 150 stations surrounding the Keys, and sea grass we do annually at 36 permanent stations and a bunch of other places.

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96 EPA has put in about \$1.8 million into special studies, trying to figure out cause/effect relationships, what happens when you flush your toilet, how long does the water take before it gets to surface waters, or what are the causes of coral diseases, for example, trying to get at those serious questions. We put some of that into a document, and I've brought about ten copies of this with me, Water Quality Concerns in the Florida Keys: Effects and Solutions, which sort of summarizes the

state of the science of what we know.

I think if I had a suggestion to you all in partnering, is to get a partner that has some money

(Laughter.)

DR. KRUCZYNSKI: -- and is willing to bring it to the table. Because Congress told us to be here, we were very lucky. We've got about a 1.4 million budget a year to help with the management of the Sanctuary.

The other key issue that I'd like to tell you is that it's critical to have a person on site. We couldn't get a lot of this stuff done if EPA wasn't willing to stick a person in the Keys that likes to

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1	fish, likes to swim, and is willing to work with Billy
2	on occasion.
3	(Laughter.)
4	DR. KRUCZYNSKI: That's all I have to
5	really say about partnering with the Sanctuary.
6	Billy asked me if " if I have one more
7	minute, Billy?
8	MR. CAUSEY: Actually, you used it up, but
9	go ahead.
10	DR. KRUCZYNSKI: Other agencies that we're
11	partnering with. I've been involved with the Dredge
12	and Fill Program since 1972, which is Section 404 of
13	the Clean Water Act. And there Congress made the
14	mistake of telling the Corps of Engineers that you
15	will manage the program, and EPA, you will oversee the
16	program. And that's led to nothing but hardships up
17	until today. We never agree on jurisdiction. We
18	never agree on how the regulations are supposed to be
19	implemented, et cetera, et cetera. So having two
20	agencies oversee the same program, I think, is a
21	mistake.
22	MR. CAUSEY: Okay, thank you.
23	And now we have time to open it up for
24	some Q and A?
25	CHAIRMAN BROMLEY: Well, as a matter of

1 fact, we don't. We could entertain one, but we're already five minutes behind. 2 Let me ask you this, will each of you be 3 on the boat with us this afternoon? 4 5 MR. CAUSEY: Bob will be there. I'll be Kacky will be there. 6 there. Three of us. 7 I see hands. CHAIRMAN BROMLEY: 8 questions are to one of the three that will be on the 9 boat with us today, let's do it then. 10 DR. CHATWIN: Thanks for giving us this 11 presentation. I have a question which Dr. Kruczynski 12 started to address, and that is, were all your partnerships mandated by legislation, or the ones that 13 14 you identified were necessary in the course of " 15 MR. CAUSEY: In the Florida Keys National 16 Marine Sanctuary Act in 1990, Congress did in fact 17 direct us to: 1) establish a Sanctuary Advisory 18 Council to help advise Sanctuary Managers, but they 19 also laid out the need to work with state, Federal, 20 local partners and agencies in implementation of the 21 Management Plan. We did that from the very beginning 22 by bringing together an inter-agency core group that 23 helped us actually not only write the Management Plan 24 but develop all Then of the concepts. that

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particularly with the Water Quality Protection portion.

DR. OGDEN: One quick question. By the way, thank you very much for coming here, and I really hope you understand that this is a true model for what we expect will be the situation with regards to marine protections in the future all over the country.

I have to ask a difficult question of Linda, though, because yesterday we heard of the FWC's comments, and I don't know whether this is off-handed or not, that essentially marine reserves, that is, places where fishing is prohibited, would be used in the scheme "in your scheme only as a last resort.

MS. CANZANELLI: In the Memorandum of Understanding that Biscayne established with the Florida Fish and Wildlife Conservation, there is a paragraph in there where the FWC says that during the first five years unless there's sort of overwhelming scientific compelling information -- they going to support no-take areas Fisheries Management Plan. And basically because what we've agreed to do is to try a progressive group of things to try to improve fisheries. And the peer review science supports that. There's real difference of opinion as to whether or not no-take areas actually

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Now, we're also at the same time doing a General Management Plan, which is twenty-year planning document. And within the Memorandum of Understanding we also said that Biscayne National Park may propose no fishing areas in our General Management Plan, that the FWC is not a partner in. purely National Park Service document. And that we would potentially propose that, because the goal of a General Management Plan is to protect ecosystems and to enhance visitor experiences. And there is " if you do a literature search on no-take areas with regards to protection of ecosystem, it is overwhelmingly in support that no-take areas are very beneficial to ecosystems.

So we're in the process of "we just went through a ninety-day public comment period. We're in the process of reviewing all those comments, and we'll be coming out with another draft document on our General Management Plan. So we're a little bit split on that.

DR. RAY: Thank you. Just a great compliment, to see the coordination between state and Federal. It's very reassuring to see that.

My diving started in the Keys in 1960 on

Little Key, so most of the places that you represent I've been over the years.

Real quickly, two questions. One, do you feel that the level of monitoring you've had is adequate, and secondly, the fact that a fair majority of the area has been protected for quite a few years now and monitored, does the monitoring show that since being under protection that the condition of the Keys has started to improve, or are we still in a decline?

MR. CAUSEY: I'll go ahead and take that first, and I'll say, in answer to the latter part of your question, is that I would have to say we're in a state of decline. But -- although we've seen our coral monitoring has demonstrated that we've seen a leveling off of the amount of coral loss that we're seeing. And this has been demonstrated from our Comprehensive Coral Monitoring Plan.

What we haven't seen is that this has not turned up again. In fact, we're not seeing new growth or tremendous recruitment.

The monitoring has shown us a lot, not just what we're seeing through the EPA funded project, but also many other projects. And I feel that this is probably the most intensely monitored Marine Protected Area in the world, and I think John would agree with

me on that. And still, I could have questions unanswered every day, but I think we have enough information to make some of the tough decisions that we should be making.

But the decisions are far more complex than just me pushing or Kacky going to the Governor and Cabinet. It involves local communities. It involves society. And I hear you talking about how society is being fed into this process, and that's so critical.

I hope I answered your question. The answer is yes, we have a lot of monitoring. We're still seeing decline in some areas, but I feel confident that we're going to turn the corner on that over time.

CHAIRMAN BROMLEY: The counter to that is what would the situation be had you not been in place working. I think the real test of this is what would the system have been?

MR. CAUSEY: It's phenomenal in what we've been able to accomplish. And I have to say the success there, even if we look at sea grass scarring, boat crop scarring or whatever, we're seeing major accomplishments in some areas. As far as coral decline that is occurring at the global, regional and local scales, that's a little harder for us to be able

to get our arms around and say this is the cause. But we hope to be able to do that.

CHAIRMAN BROMLEY: Bill, can you say something in thirty seconds?

MR. KIEFER: Thirty seconds? No.

(Laughter.)

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The Water Quality Monitoring MR. KEIFER: Program is 150 stations taken quarterly. Αm satisfied with that? The answer is no. We don't have " it's just too infrequent. We've been doing it since 1995, so we have enough data to show trends. We show increasing phosphorus, almost linear, since 1995, and in waters around the Keys, and increased nitrogen But the sampling is too infrequent around the Keys. to get at the sources very well. We don't know whether it's from episodic events like run-off from the Mississippi River, or whether it's something else. So I'm not happy with that.

MR. O'HALLORAN: I just have a question to see whoever's going to be on the boat today. We've heard about the Dry Tortugas as being an excellent model of success, and I'm real interested in finding out more about that process, particularly as involved with local communities and users. Is someone going to be on the boat to "

MR. CAUSEY: I'll be on board.

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MR. HOWARD: Can I do just one quick thing, which was the statement about the monitoring. I failed to bring up with Billy and with EPA the Waterway series, and as probably all of you know, one of the crucial elements is education of the public, and I think that that's one of the bigger success stories, the Waterway series and the inter-agency Visitor's Center down in Key West. So I think that's again one of the things that we've seen happen because of the work we've had together.

MR. CAUSEY: And Waterways is a TV program that EPA, the Park Service and Sanctuary fund, and it's aired on seventeen cable stations, and then we also have an inter-agency Visitor's Center that's going down in Key West at the Dr. Nancy Foster Florida Keys Environmental Complex. That's going to be the Sanctuary, State of Florida, National Park Service, as well as Fish and Wildlife Service.

I think we're going to have to stop or we're going to miss our boat.

(Whereupon, the meeting was in recess at 12:05 p.m. until 8:00 a.m., Thursday, April 8, 2004.)